Fastener Manufacturers Improve **'Drivability'** with Unique Coatings

Since cordless tool battery life is a serious concern for pros and DIYs, a growing number of fastener manufacturers are addressing the issue with unique coatings that dramatically increases the "drivability" of nails and screws. This, in turn, minimizes the amount of power used by cordless



tools, extends the battery life and increases productivity since fasteners can be fixed faster and in higher volume before the battery must be changed out or recharged.

Drivability can also impact gas-actuated fastening systems that utilize fuel cells, coupled with batteries, to drive framing nails, finishing brads or screws without having to connect to an air compressor or power cord. By improving drivability of framing nails, a more economical and efficient 2,000 nails could be achieved per fuel cell, for example. This was the specific goal of one fastener manufacturer that sought his company's help in creating a specialty coating that would dramatically improve the drivability of nails.

The challenge was to create a custom coating for the nails that improved drivability without allowing it to be easily removed. Some chemists successfully figured out a coating formulation that improved nail drivability by 25%, while meeting required anti-withdrawal properties.

The specialty coating allowed the customer to re-launch the product and market it as incorporating new, improved technology. They were able to increase their revenue and were very successful with it. The coating also potentially increases the number of nails that could be driven on a single, full battery charge, a high priority for cordless tool manufacturers and users.

Whether a pro wields a framing nailer at a construction site or a DIYer uses a finish nailer to install moldings or baseboard, no one wants to interrupt the job to change out, or recharge, a dead battery. The same is true for anyone using a cordless screwdriver, drill driver, or impact driver. To address this issue, various strategies have been employed to extend battery life. Some include moving to more powerful, longer-lasting lithium batteries along with techniques to avoid overcharging.

Instead, forward thinking fastener manufacturers consider custom coatings that help to speed jobs and maximize cordless power tool life in the field. In a competitive market like fasteners, coatings can be used to create innovative new products with a clear-cut differentiation from the competition.

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